

NAT'L INST. OF STAND & TECH R.I.C.



A11104 119770

NATIONAL INSTITUTE OF STANDARDS &
TECHNOLOGY

Research Information Center
Gaithersburg, MD 20899

DEPARTMENT OF COMMERCE AND LABOR

BULLETIN

OF THE

BUREAU OF STANDARDS

S. W. STRATTON, DIRECTOR

VOLUME 5

(Nos. 1, 2, 3, 4)

1908-9



WASHINGTON
GOVERNMENT PRINTING OFFICE
1909

National Bureau of Standards

SEP 2 1952

77298

QC1

.U5

cop. 2

CONTENTS OF VOLUME 5.

[NOTE.—The number preceding the title of each article is the Reprint Number in the series of technical papers issued by the Bureau.]

No. 1.

[Issued August, 1908.]

	Page.
93. FORMULÆ AND TABLES FOR THE CALCULATION OF MUTUAL AND SELF-INDUCTANCE..... <i>Edward B. Rosa and Louis Cohen</i>	1
94. SOME CONTACT RECTIFIERS OF ELECTRIC CURRENTS..... <i>L. W. Austin</i>	133
95. A METHOD FOR PRODUCING FEEBLY DAMPED HIGH FREQUENCY ELECTRICAL OSCILLATIONS FOR LABORATORY MEASUREMENTS..... <i>L. W. Austin</i>	149
96. ON THE ADVANTAGES OF A HIGH SPARK FREQUENCY IN RADIO-TELEGRAPHY..... <i>L. W. Austin</i>	153

No. 2.

[Issued November, 1908.]

97. SELECTIVE RADIATION FROM VARIOUS SOLIDS..... <i>W. W. Coblentz</i>	159
98. REMARKS ON THE QUARTZ COMPENSATING POLARISCOPE WITH ADJUSTABLE SENSIBILITY..... <i>Frederick Bates</i>	193
99. METHODS OF OBTAINING COOLING CURVES..... <i>George K. Burgess</i>	199
100. NOTE ON THE APPROXIMATE VALUES OF BESSEL'S FUNCTIONS FOR LARGE ARGUMENTS..... <i>Louis Cohen</i>	227
101. THE INFLUENCE OF TERMINAL APPARATUS ON TELEPHONIC TRANSMISSION..... <i>Louis Cohen</i>	231
102. THE PRINCIPLES INVOLVED IN THE SELECTION AND DEFINITION OF THE FUNDAMENTAL ELECTRICAL UNITS TO BE PROPOSED FOR INTERNATIONAL ADOPTION..... <i>F. A. Wolff</i>	243
103. THE LUMINOUS EQUIVALENT OF RADIATION..... <i>P. G. Nutting</i>	261
104. THE TEMPERATURE FORMULA OF THE WESTON STANDARD CELL..... <i>F. A. Wolff</i>	309

No. 3.

[Issued February, 1909.]

105. RADIATION CONSTANTS OF METALS..... <i>W. W. Coblentz</i>	339
106. DEPENDENCE OF MAGNETIC HYSTERESIS UPON WAVE FORM..... <i>Morton G. Lloyd</i>	381
107. A NEW FORM OF STANDARD RESISTANCE..... <i>Edward B. Rosa</i>	413
108. ERRORS IN MAGNETIC TESTING WITH RING SPECIMENS..... <i>Morton G. Lloyd</i>	435

No. 4.

[Issued May, 1909.]

	Page.
109. THE TESTING OF TRANSFORMER STEEL.....	
..... <i>M. G. Lloyd and J. V. S. Fisher</i>	453
110. A NEW METHOD OF DETERMINING THE FOCAL LENGTH OF CONVERGING LENSES.....	
..... <i>Irwin G. Priest</i>	483
111. A NEW METHOD FOR THE ABSOLUTE MEASUREMENT OF RESISTANCE.....	
..... <i>Edward B. Rosa</i>	499
112. THE THEORY OF COUPLED CIRCUITS.....	
..... <i>Louis Cohen</i>	511
113. A VOLT SCALE FOR A WATTS-PER-CANDLE METER.....	
..... <i>Herbert E. Ives</i>	543
114. THE COEFFICIENT OF REFLECTION OF ELECTRICAL WAVES AT A TRANSI- TION POINT.....	
..... <i>Louis Cohen</i>	549
115. A TUNGSTEN COMPARISON LAMP IN THE PHOTOMETRY OF CARBON LAMPS	
..... <i>Herbert E. Ives and L. R. Woodhull</i>	555



